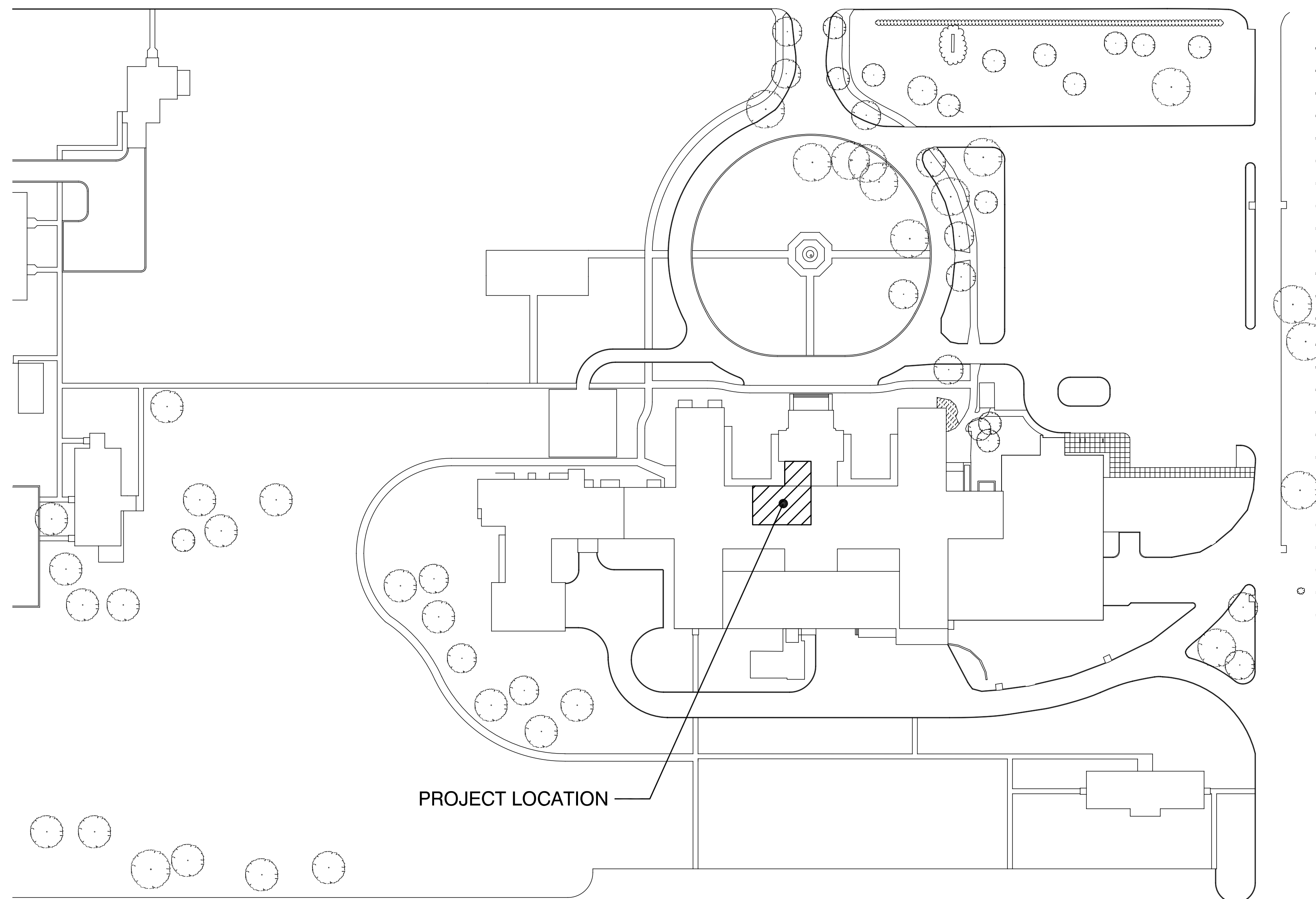


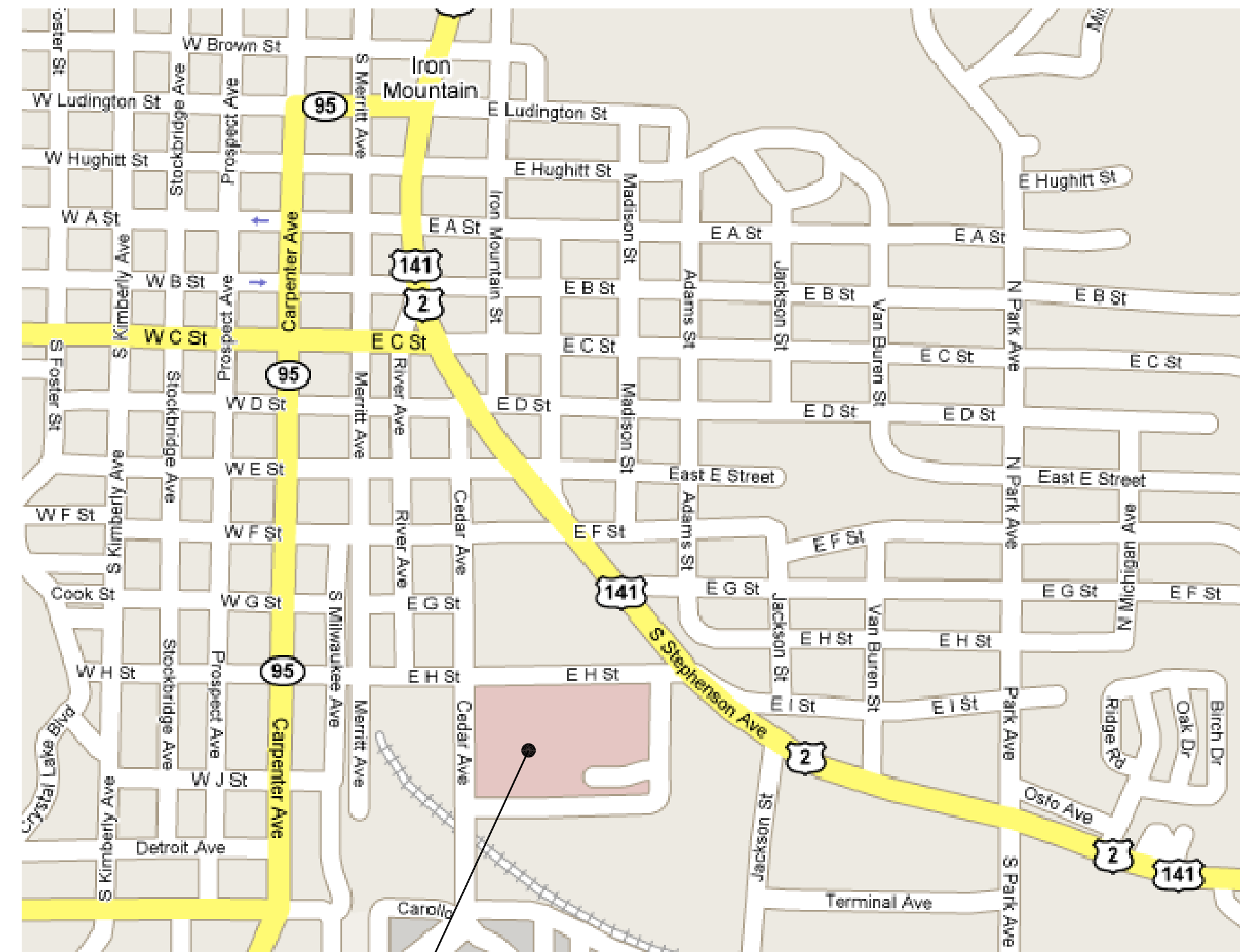
VA PROJECT NUMBER 585-08-110

REPLACE HVAC TELEPHONE ROOM

VA MEDICAL CENTER
325 E. "H" STREET
IRON MOUNTAIN, MI 49801



1 SITE PLAN
1" = 60'-0"



2 VICINITY MAP
NTS



SHEET INDEX

| | |
|-------|--|
| G.100 | TITLE SHEET / SITE PLAN / VICINITY MAP |
| A.100 | DEMOLITION PLAN / PHASING PLAN / DEMOLITION WINDOW DETAILS |
| A.101 | FLOOR PLAN / REFLECTED CEILING PLAN / WINDOW ELEVATIONS / WINDOW DETAILS |
| M.100 | MECHANICAL FLOOR PLANS |
| M.101 | MECHANICAL SCHEDULES / DETAILS |
| M.102 | POINTS LIST |
| E.100 | ELECTRICAL FLOOR PLANS / SCHEDULES / NOTES |

Director

Associate Director

Chief of Staff

Associate Director for N&PCS

Chief of Police

Chief of Engineering

Industrial Hygienist

Infection Control Nurse

A.F.G.E.

Patient Safety

Safety

CONSULTANTS:

ARCHITECT/ENGINEERS:



2720 Arbor Court, Suite A • Eau Claire, WI 54701
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MEP PROJECT NO.: U8.08.06

Drawing Title
TITLE SHEET / SITE PLAN /
VICINITY MAP

Approved: Project Director

Project Title
VA IRON MOUNTAIN
REPLACE HVAC TELEPHONE ROOM

Location
IRON MOUNTAIN, MICHIGAN

Date
AUGUST 26, 2008

Checked
DLG

Drawn
ERM

Project Number
585-08-110
Building Number
No. 1

Drawing Number
G.100
Dwg. 1 of 7

Office of
Construction
and Facilities
Management



A
B
C
D
E
F

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

GENERAL DEMOLITION PLAN NOTES

1. EXISTING TO REMAIN: SOLID LINES AND WALLS SHADED.
2. EXISTING TO BE REMOVED OR SALVAGED: DASHED LINES.
3. COORDINATE DEMOLITION WITH ADDITIONAL WORK ON MECHANICAL AND ELECTRICAL SHEETS.
4. DEMOLITION DRAWINGS INDICATE GENERAL DEMOLITION WORK BASED ON EXISTING DRAWINGS AND CASUAL SITE OBSERVATIONS.
5. NEW WORK INDICATED ON OTHER SHEETS REQUIRES DEMOLITION OF EXISTING CONSTRUCTION, UNLESS SPECIFICALLY NOTED TO REMAIN.
6. EXISTING SPRINKLER HEAD TRIM TO BE REMOVED. SAVE TRIM FOR REINSTALLATION IN NEW CEILINGS. SEE REFLECTED CEILING PLAN ON 2/A.101 FOR SPRINKLER HEAD RELOCATION REQUIREMENTS.

KEYED DEMOLITION PLAN NOTES

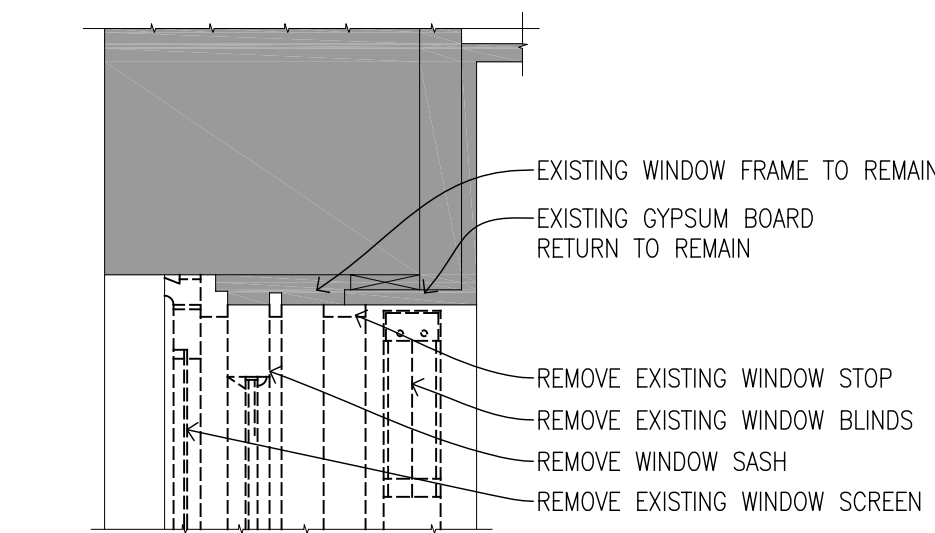
- EXISTING TO REMAIN:
E01 FLOORING.
E02 CEILING.
E03 WALL COVERING.
- REMOVE AND SALVAGE:
S01 ROLL WINDOW SHADES AND BLINDS.
- REMOVE:
R01 WINDOW SASH, SILL AND WINDOW SECURITY SCREEN. EXISTING WINDOW FRAME TO REMAIN. SEE DETAIL ON SHEET A.100.
R02 REMOVE SECURITY SCREEN AND CUT WALL OPENING, APPROXIMATELY 30"x60" TO ACCOMMODATE NEW WALL INFILL.
R03 CEILING.
R04 CONCRETE PAD.
R05 REMOVE EXISTING LOUVER AND MODIFY WALL OPENING AS REQUIRED FOR NEW WINDOW AND DUCTWORK.
R06 REMOVE PENDANT SPRINKLER HEADS.

PROJECT SCHEDULE

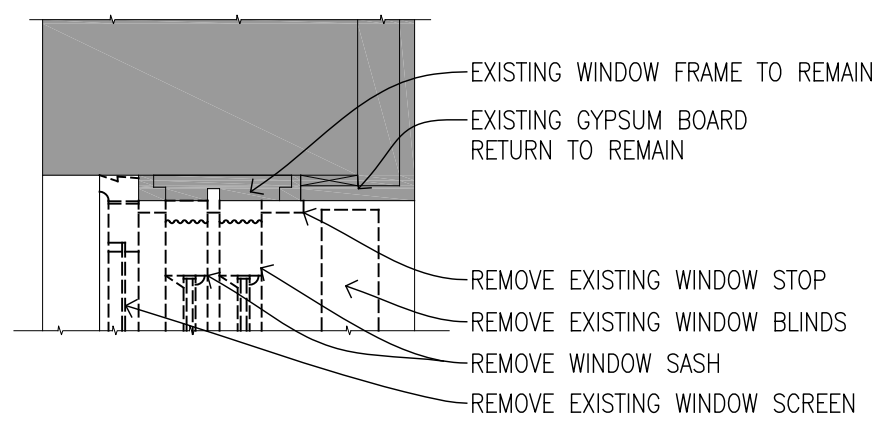
- | | |
|---------|--|
| PHASE 1 | WAN ROOM B105, VESTIBULE B107, TRAINING / CONFERENCE ROOM B107B AND MAIL ROOM B107A. |
| PHASE 2 | TELEPHONE EQUIPMENT B103. |

GENERAL PHASING PLAN NOTES

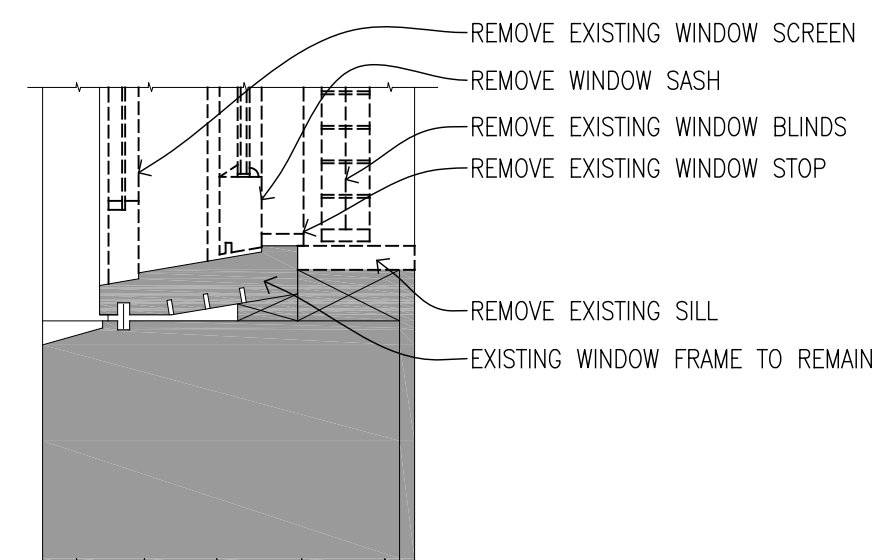
1. PROVIDE NEGATIVE PRESSURE IN EACH WORK ZONE DURING BOTH DEMOLITION AND CONSTRUCTION OPERATIONS.
2. COORDINATE DEMOLITION AND CONSTRUCTION PROCEDURES WITH OWNER'S PROJECT MANAGER.
 - 2.1. CONDUCT OPERATIONS TO LIMIT STAFF DISRUPTIONS.
 - 2.2. SCHEDULE OPERATIONS TO LIMIT PATIENT AND STAFF DISTURBANCE.
 - 2.3. LIMIT NOISE AND VIBRATION DISTURBANCE.
 - 2.4. DO NOT INTERRUPT BUILDING UTILITY SERVICES WITHOUT WRITTEN PERMISSION AT LEAST 5 DAYS IN ADVANCE.
 - 2.5. DO NOT PROCEED WITH WORK WITHOUT WRITTEN PERMISSION WHEN WORK MAY CAUSE DISTURBANCE OR INTERRUPTION OF BUILDING SERVICES.
3. PROVIDE A MINIMUM OF (1) TEMPORARY FIRE EXTINGUISHER MOUNTED IN A CONSPICUOUS PLACE; TYPE 10 ABC. FIRE EXTINGUISHER MAY BE MOUNTED TO CONTRACTOR'S CART OR OTHER CONVENIENT LOCATION OR MOVEABLE EQUIPMENT.
4. PROVIDE TACKY WALK-OFF MAT OUTSIDE DOORS IN CONSTRUCTION BARRIERS.
5. WORK AREAS ARE HIGHLY SECURE AREAS. CONTRACTORS WILL NEED TO SIGN IN AND OUT OF THE TELEPHONE ROOM, MAIL ROOM AND WAN ROOM, AND MUST BE ACCOMPANIED WHILE WORKING IN THOSE AREAS. ALL CONTRACTOR EMPLOYEES MUST BE INFORMED OF THE SENSITIVE NATURE OF THE LOCATIONS. ELECTRONIC DEVICES WILL NOT BE ALLOWED IN THE WORK AREAS. ALL CARTS AND TOOL BOXES ARE SUBJECT TO SEARCH. CONTRACTORS TO COORDINATE CONSTRUCTION SCHEDULE AND SCHEDULE THEIR WORK TO MINIMIZE DISTURBANCE AT SECURED AREAS.
6. CONTRACTORS TO CORRDINATE DUST CONTROL MEASURES WITH COTR PRIOR TO DEMOLITION AND NEW WORK.



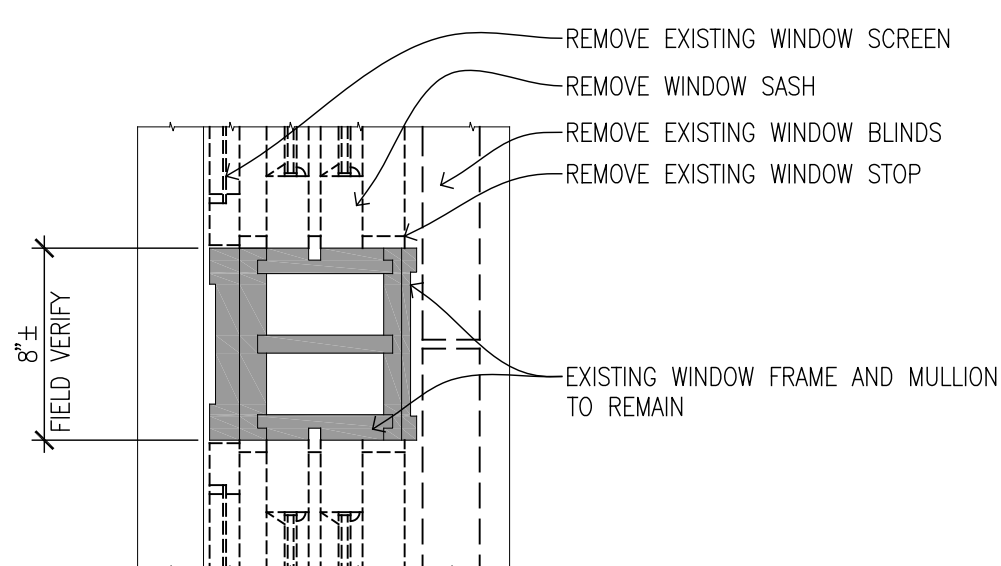
3 HEAD DEMOLITION DETAIL
1 1/2" = 1'-0"



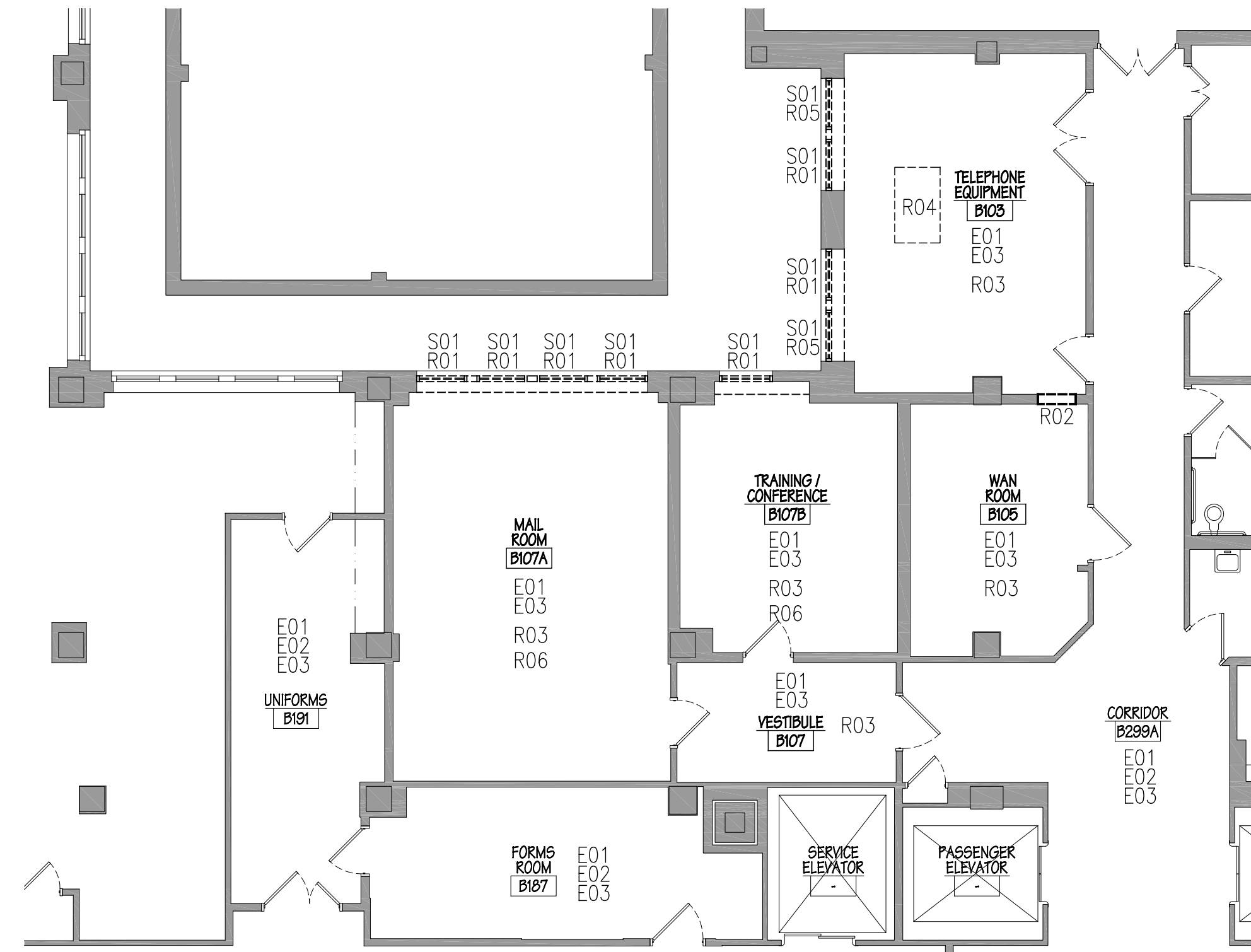
4 JAMB DEMOLITION DETAIL
1 1/2" = 1'-0"



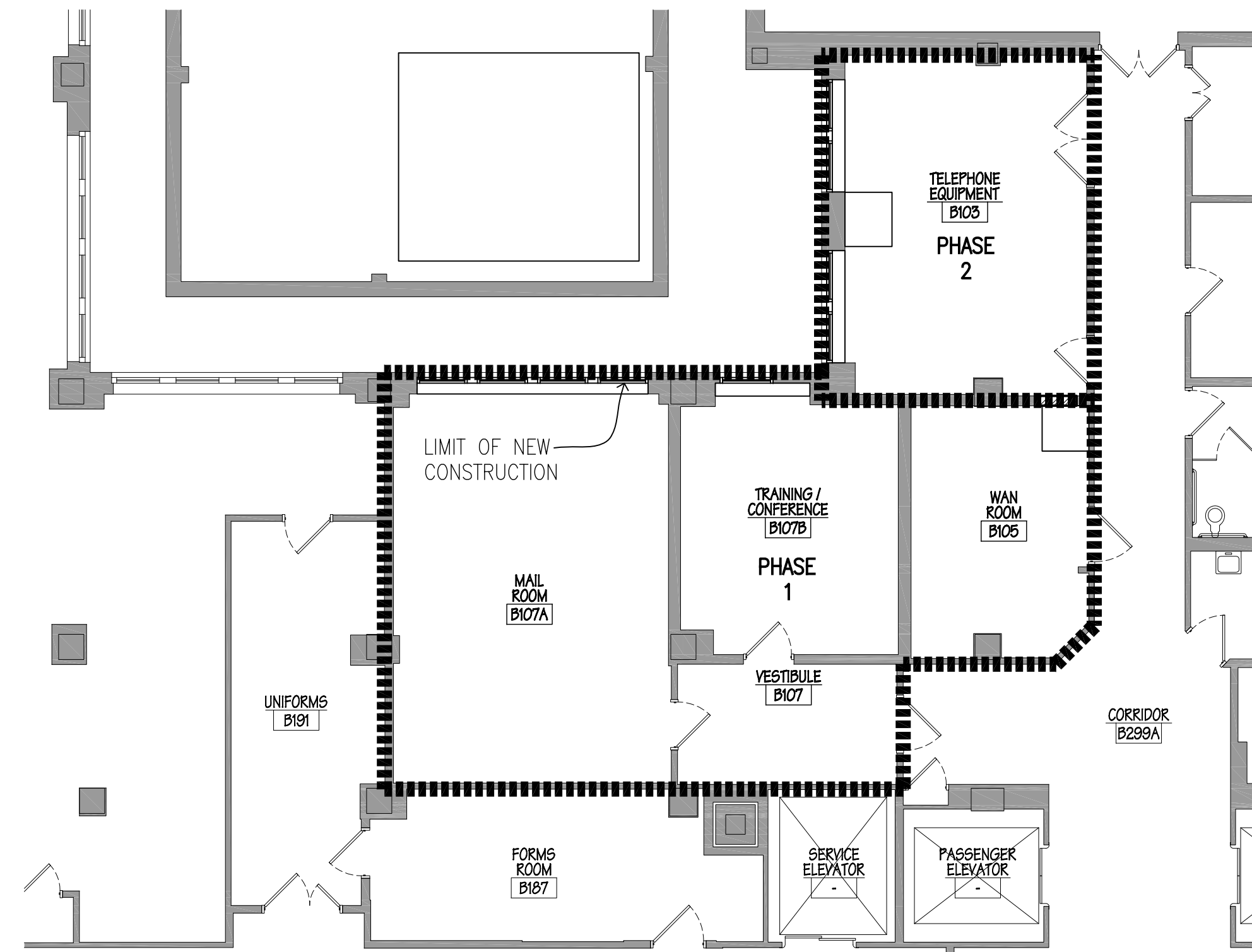
5 SILL DEMOLITION DETAIL
1 1/2" = 1'-0"



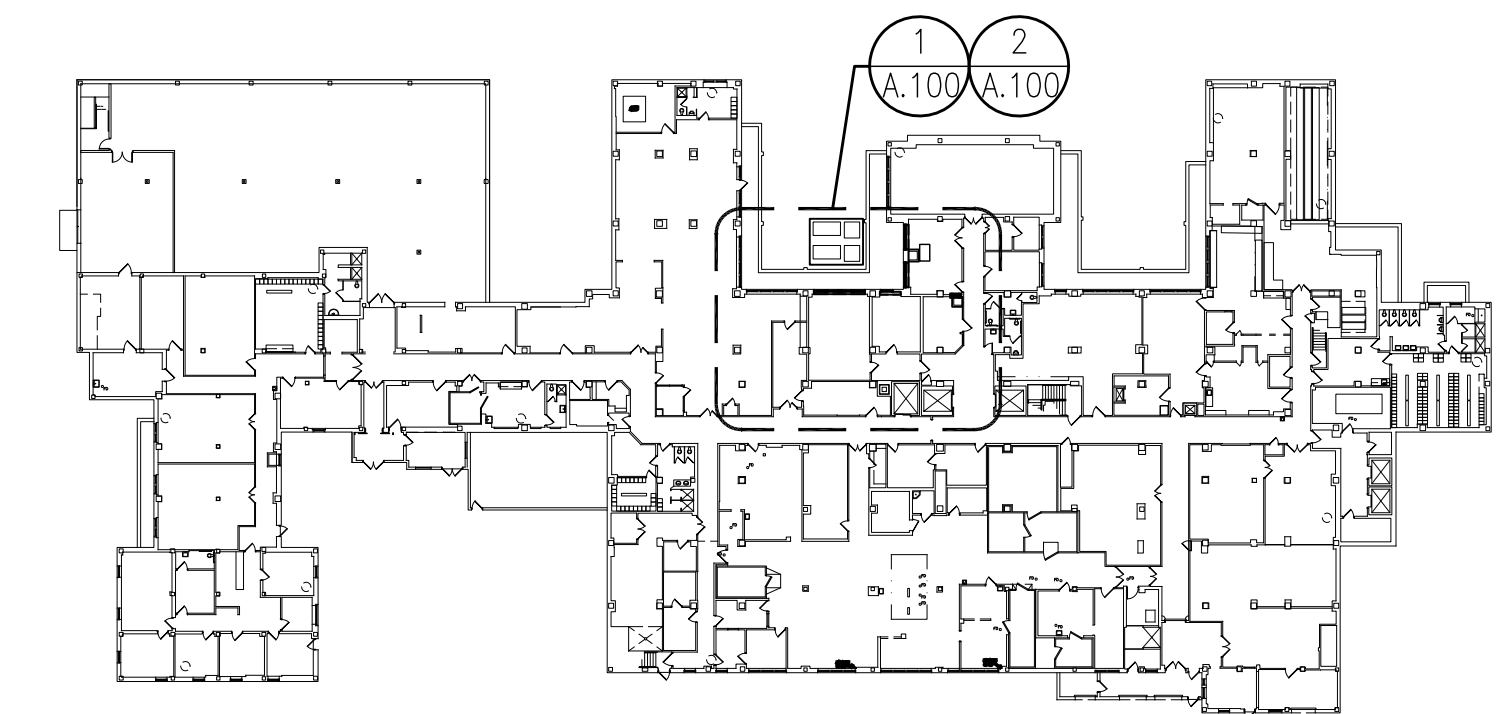
6 MULLION DEMOLITION DETAIL
1 1/2" = 1'-0"





1 DEMOLITION PLAN
1/8" = 1'-0"



2 PHASING PLAN
1/8" = 1'-0"



KEY PLAN

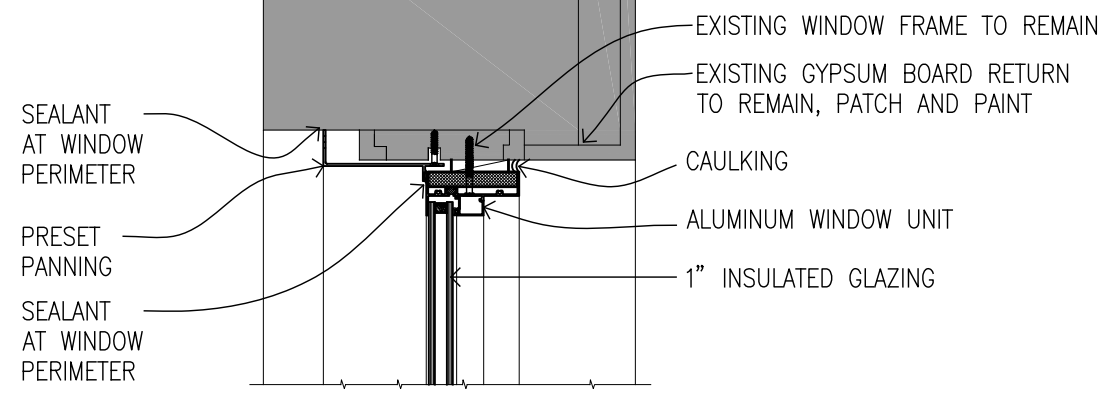
| | | | | | | | | | |
|--------------------------------------|--|--------------|---|----------------------|--|---|--|--|---|
| <div>Revisions</div> <div>Date</div> | | CONSULTANTS: |  | ARCHITECT/ENGINEERS: |  <div>ARCHITECTS ENGINEERS COMMISSIONING AUTHORITIES</div> <div>2720 Arbor Court, Suite A • Eau Claire, WI 54701 715.832.5680 • Fax 715.832.5668 www.mepasassociates.com • info@mepasassociates.com MEP PROJECT NO.: U8.08.06</div> | Drawing Title PARTIAL BASEMENT DEMOLITION PLAN WINDOW DETAILS | Project Title VA IRON MOUNTAIN REPLACE HVAC TELEPHONE ROOM | Project Number 585-08-110 | Office of Construction and Facilities Management |
| | | | | | Approved: Project Director | Location IRON MOUNTAIN, MICHIGAN | Building Number No. 1 | Drawing Number A.100 Dwg. 2 of 7 | |
| | | | | | | Date AUGUST 26, 2008 | Checked DLG | Drawn ERM | |

- GENERAL FLOOR PLAN NOTES
1. PATCH EXISTING SURFACES AND FINISHES DISTURBED BY DEMOLITION WORK LEVEL AND PLUMB.
 2. PATCH EXISTING FINISHES DISTURBED BY DEMOLITION OPERATIONS TO MATCH EXISTING PRODUCTS, UNLESS SPECIFICALLY NOTED OTHERWISE.
 3. INTERIOR DIMENSIONS:
 - 3.1. STUD WALLS: FACE OF STUD, NOMINAL.
 - 3.2. MASONRY WALLS: FACE OF MASONRY, NOMINAL.
 - 3.3. EXISTING WALLS: FACE OF WALL SURFACE.
 - 3.4. OPENINGS: INSIDE FACE OF OPENING.

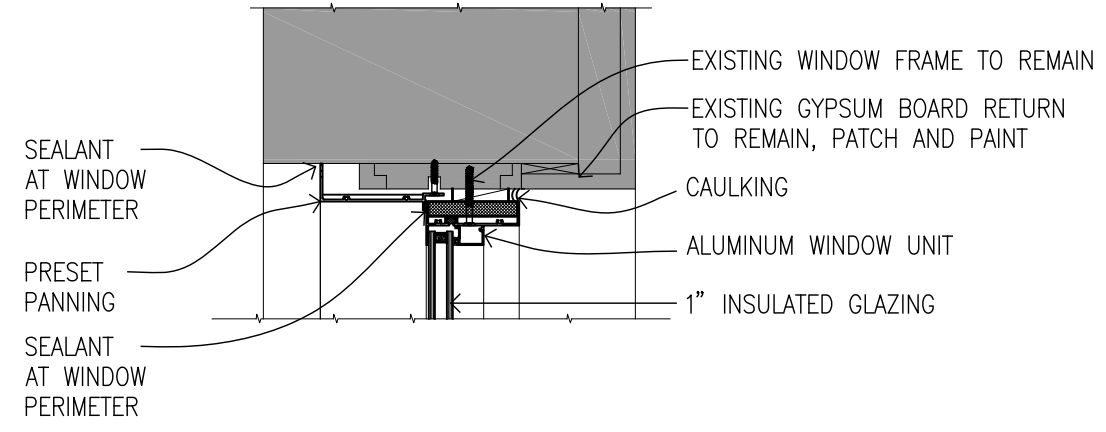
- KEYED FLOOR PLAN NOTES
- FP01 MODIFY EXISTING WOOD WINDOW FRAME AS REQUIRED TO RECEIVE NEW WINDOW FRAME. PROVIDE NEW PLAM SILL AND PAINT EXISTING GYPSUM BOARD RETURN AT HEAD AND JAMB.
- FP02 REINSTALL SALVAGED ROLL WINDOW SHADES AND BLINDS.
- FP03 PATCH FLOOR AND BASE TO MATCH EXISTING FLOOR AND BASE. VERIFY EXTENT OF PATCHING.
- FP04 INFILL EXISTING WALL OPENING. ALIGN FACE OF NEW WALLS WITH FACE OF EXISTING WALLS. PAINT ENTIRE WALL SURFACE TO MATCH ADJACENT WALLS.
- FP05 INFILL EXISTING WALL OPENING WHERE DUCTS ARE REMOVED. SEE SHEET M.100.
- FP06 4" CONCRETE HOUSE KEEPING PAD. VERIFY SIZE WITH MECHANICAL CONTRACTOR.
- FP07 REMOVE TOP SOIL AND PROVIDE NEW 4" CONCRETE HOUSE KEEPING PAD WITH 6x6-W1.4xW1.4 W.W.F. ON 6" COMPACTED GRANULAR FILL. VERIFY SIZE WITH MECHANICAL CONTRACTOR.

- GENERAL CEILING PLAN NOTES
1. PATCH EXISTING CEILINGS DISTURBED BY DEMOLITION WORK, MATCH EXISTING PRODUCTS UNLESS SPECIFICALLY NOTED OTHERWISE.
 2. CEILING HEIGHTS ARE AS INDICATED, MATCH EXISTING HEIGHTS WHERE REQUIRED.

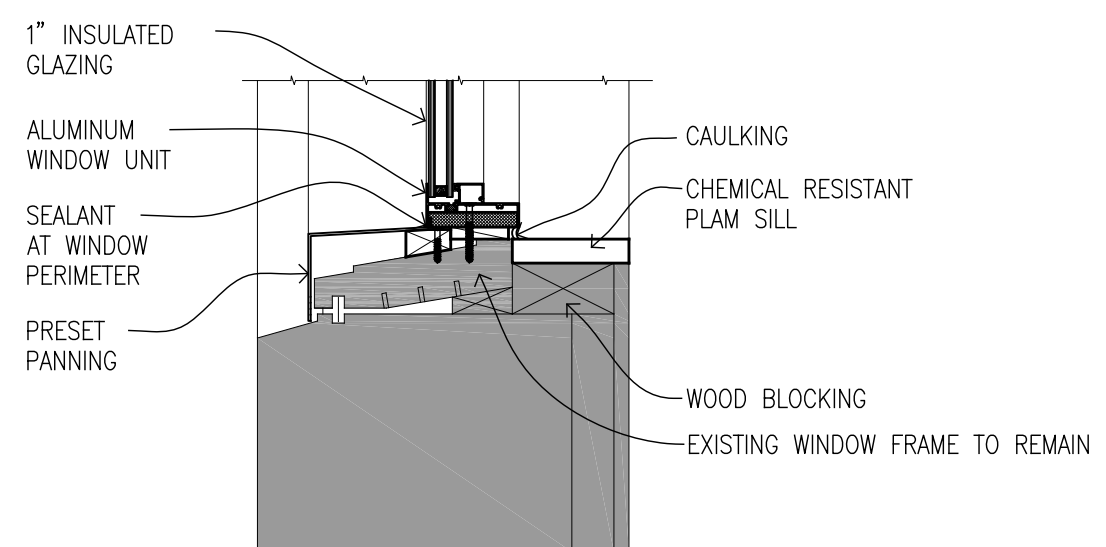
- KEYED CEILING PLAN NOTES
- CP01 RELOCATED SPRINKLER HEAD.
- CP02 REPLACE PENDENT SPRINKLER HEAD WITH QUICK RESPONSE SPRINKLER HEAD.



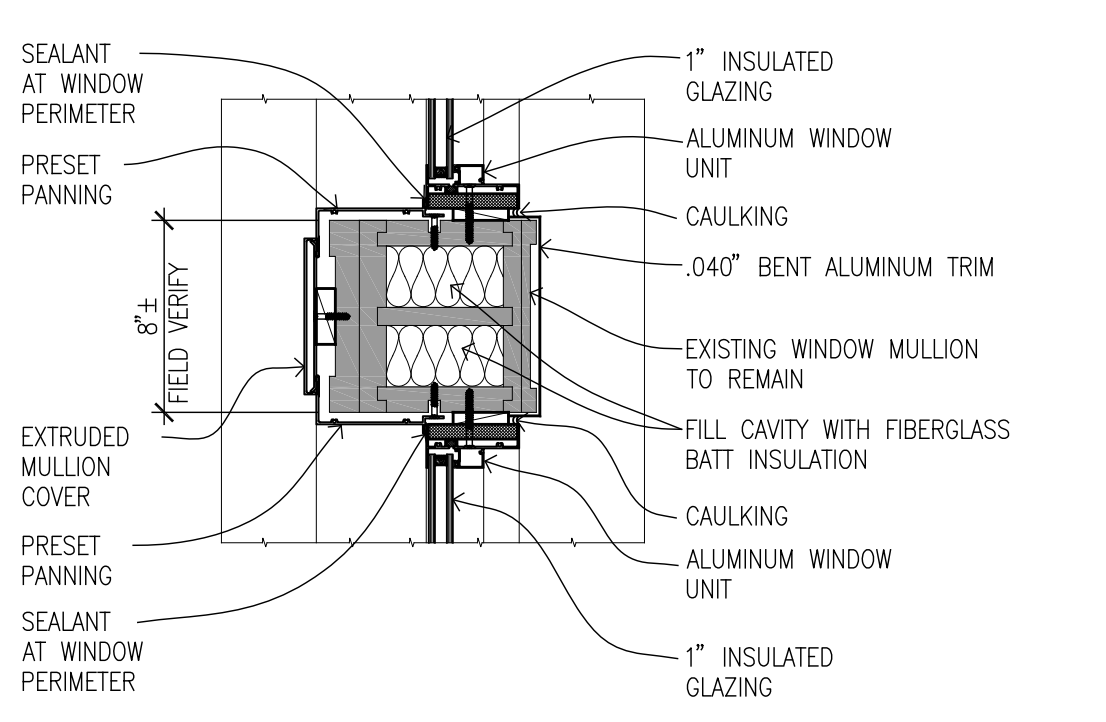
3 HEAD DETAIL
1 1/2" = 1'-0"



4 JAMB DETAIL
1 1/2" = 1'-0"



5 SILL DETAIL
1 1/2" = 1'-0"

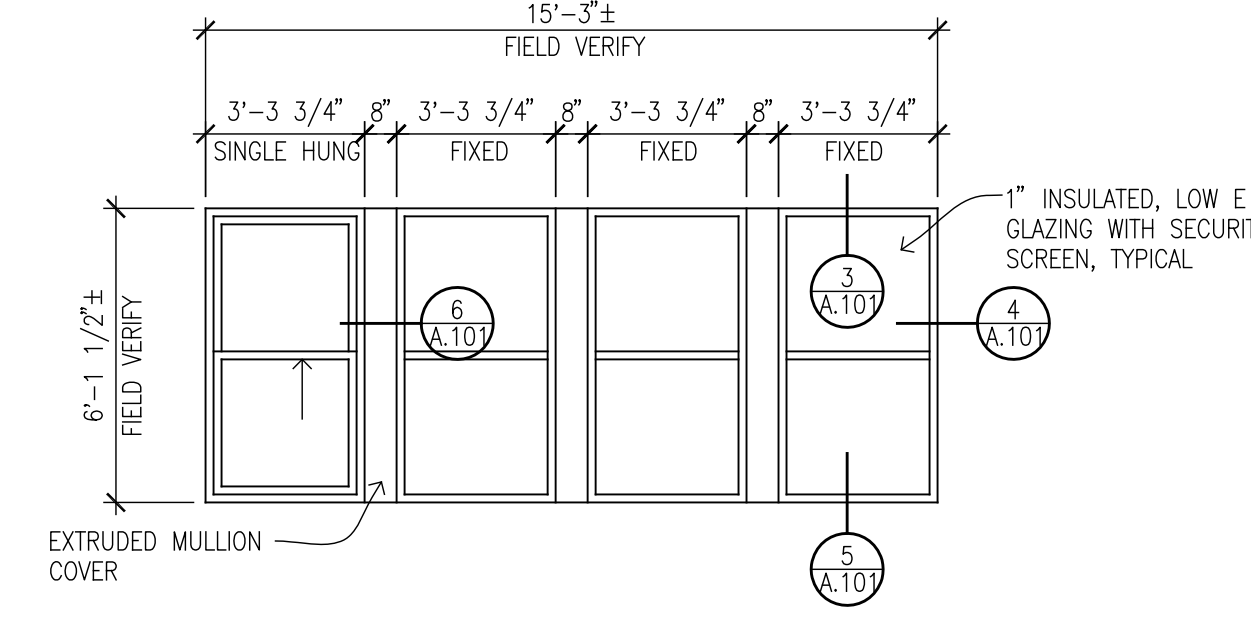
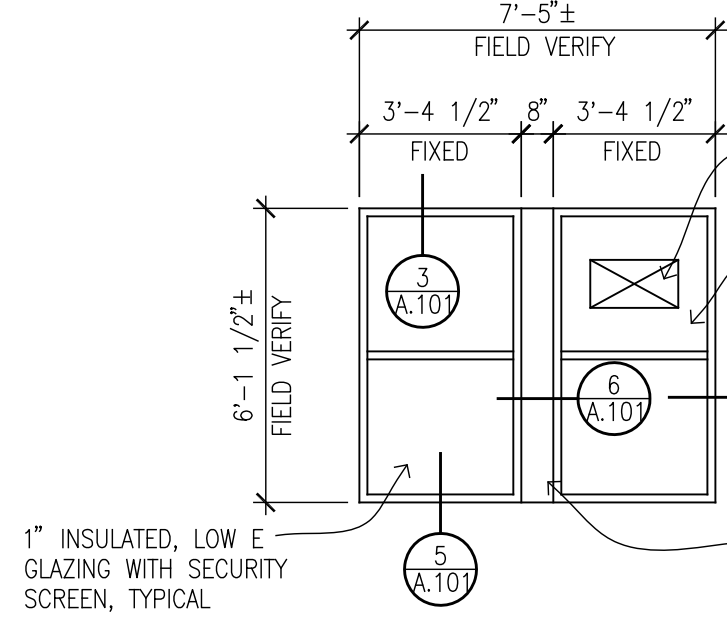
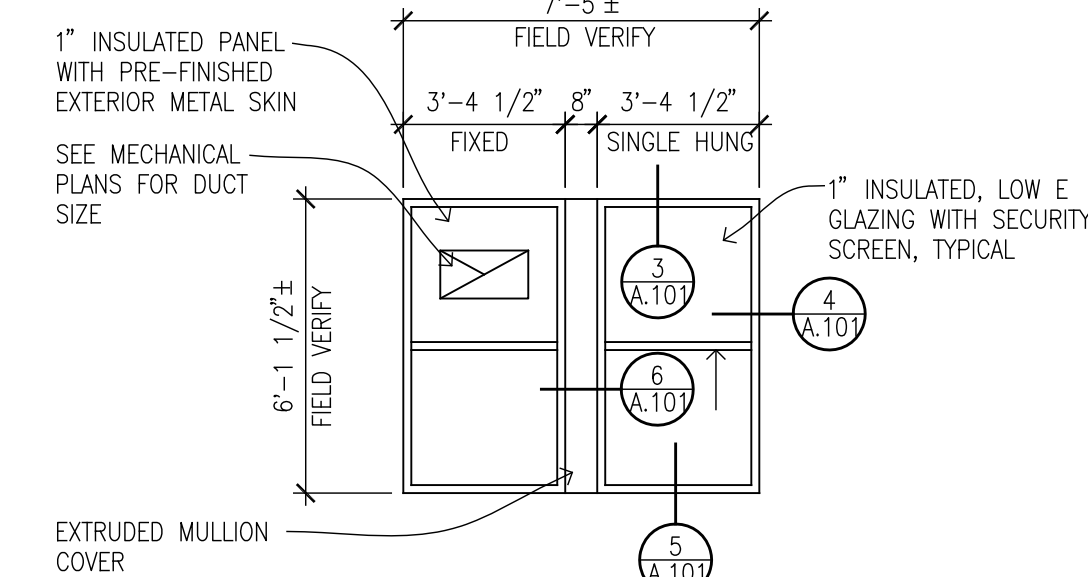
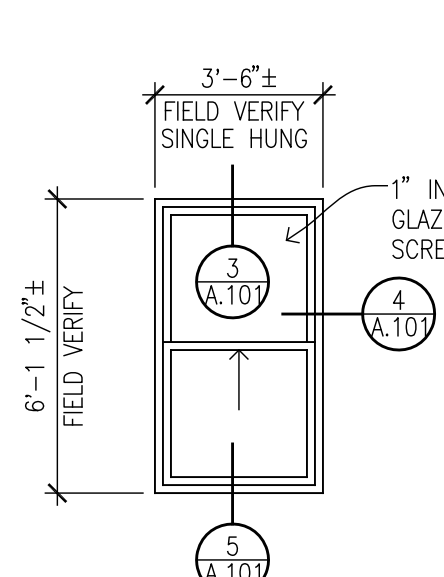
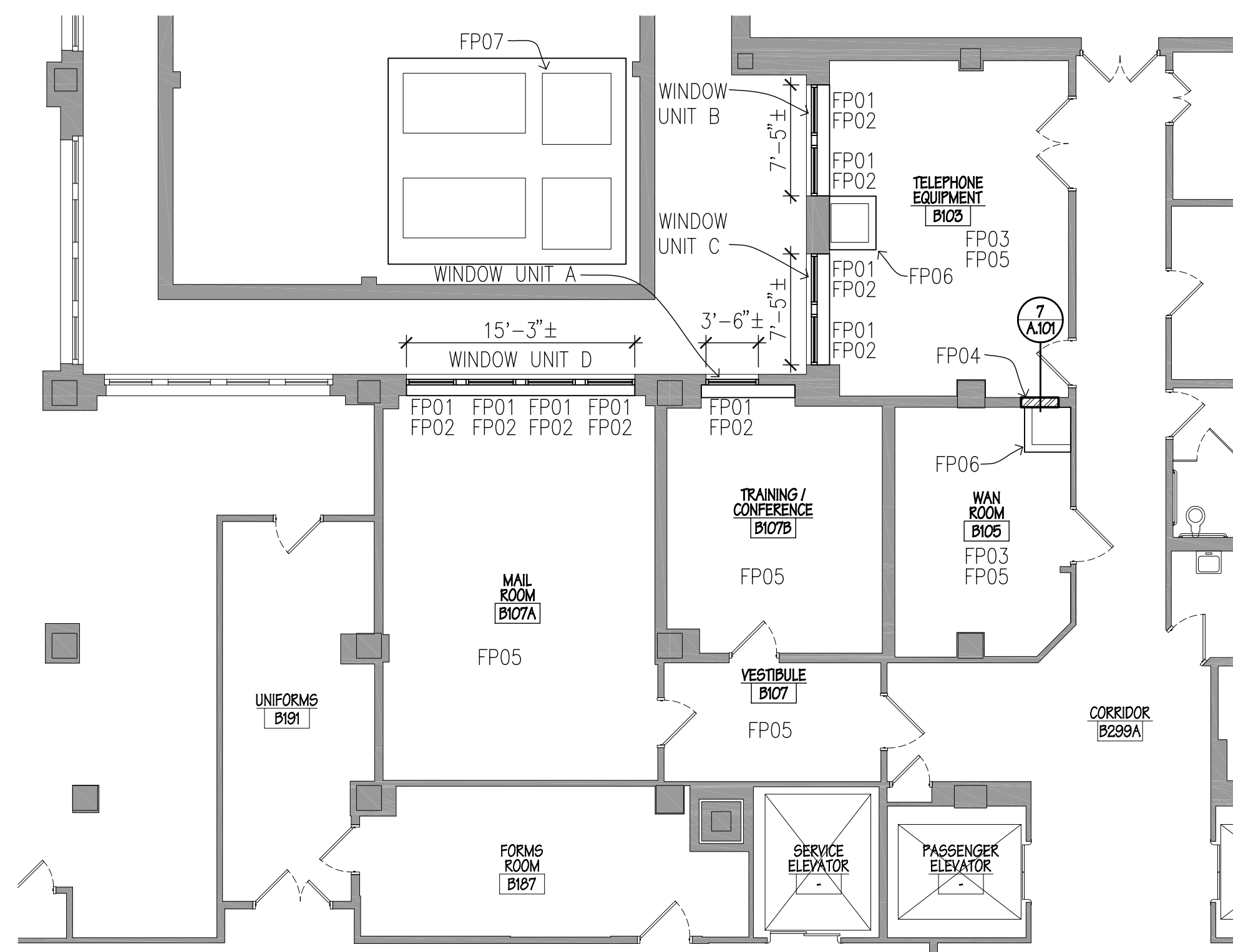


6 MULLION DETAIL
1 1/2" = 1'-0"

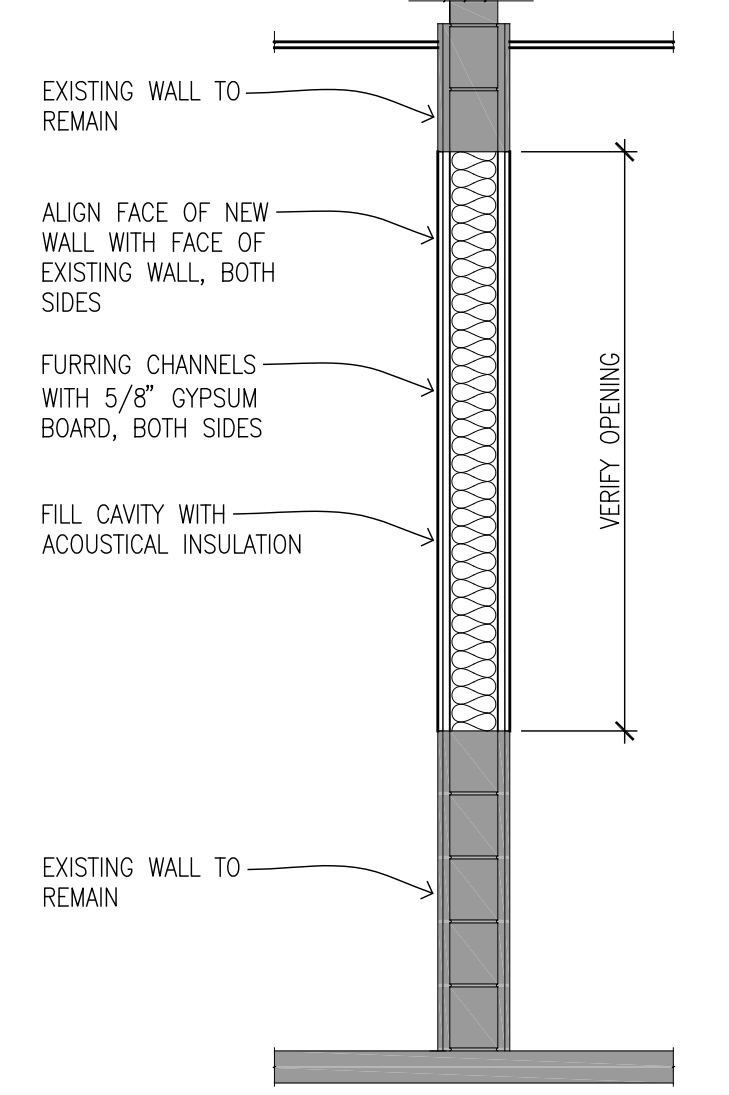
2 REFLECTED CEILING PLAN
1/8" = 1'-0"



1 FLOOR PLAN
1/8" = 1'-0"



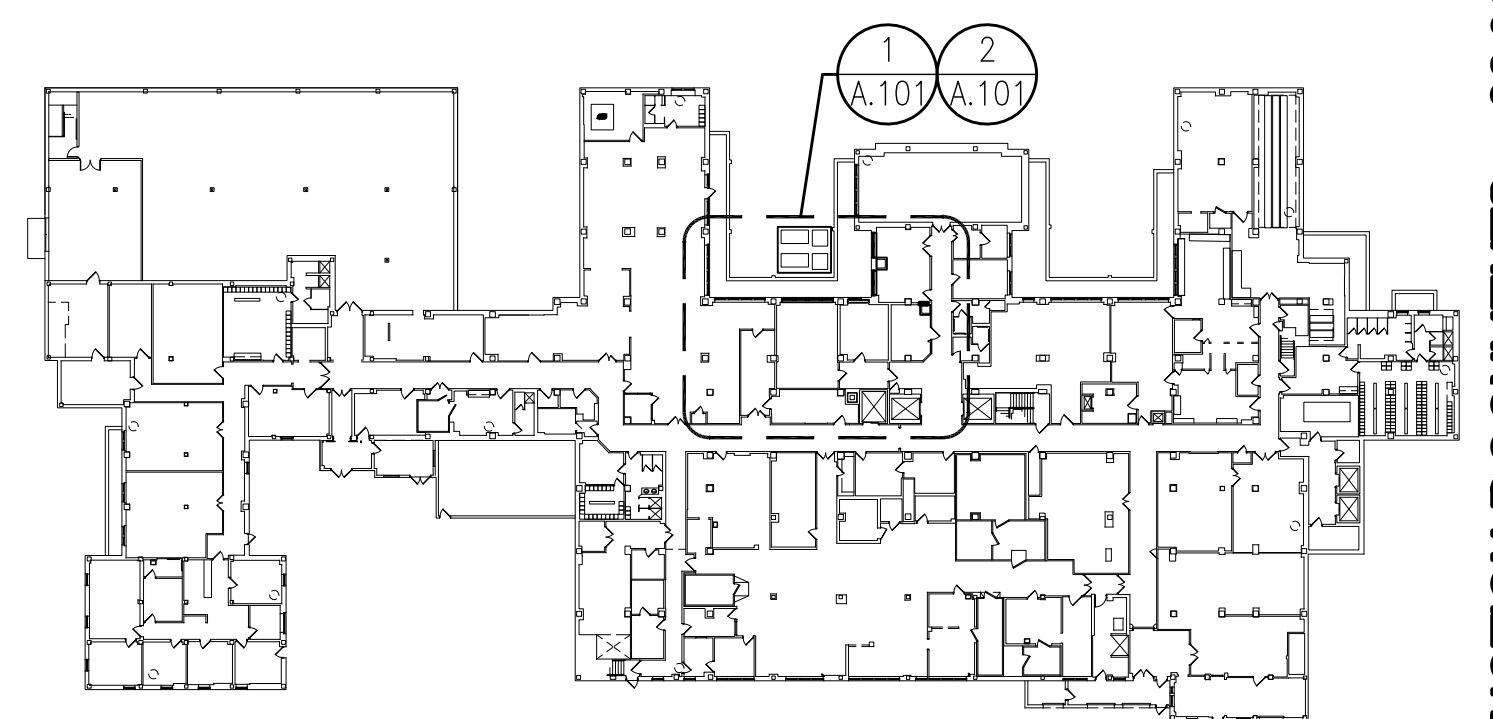
8 WINDOW ELEVATIONS
1/4" = 1'-0"



7 WALL INFILL
1/2" = 1'-0"

| SCHEDULE FOR FINISHES | | | | | | | | | | | | | |
|-----------------------|-----------------------|-----------|------------|------------|---------------|------------|--------|---------------|------|------|------|------|------|
| NO. | NAME | FLOOR | | WALLS | | CEILING | | NOTES | | | | | |
| | | SUBSTRATE | FINISH | SUBSTRATE | FINISH | SUBSTRATE | FINISH | | | | | | |
| B105 | TELEPHONE EQUIPMENT | EXST | EXST / VCT | EXST / NEW | EXST | EXST | EXST | EXST / GYP BD | PNT | EXST | EXST | ACT | NA |
| B105 | MAIL ROOM | EXST | EXST / VCT | EXST / NEW | EXST / GYP BD | EXST / PNT | EXST | EXST | EXST | EXST | EXST | ACT | NA |
| B107 | VESTIBULE | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | ACT | NA |
| B107A | MAIL ROOM | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | ACT | NA |
| B107B | TRAINING / CONFERENCE | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | ACT | NA |
| B187 | FORMS ROOM | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST |
| B181 | UNIFORMS | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST |
| B298A | CORRIDOR | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST | EXST |

- NOTES/KEY:
1. PATCH EXISTING VCT FLOORING. FIELD VERIFY EXTENT OF PATCHING.
 2. PATCH EXISTING BASE. FIELD VERIFY EXTENT OF PATCHING.
 3. PAINT ENTIRE WALL TO MATCH ADJACENT EXISTING WALLS.



KEY PLAN

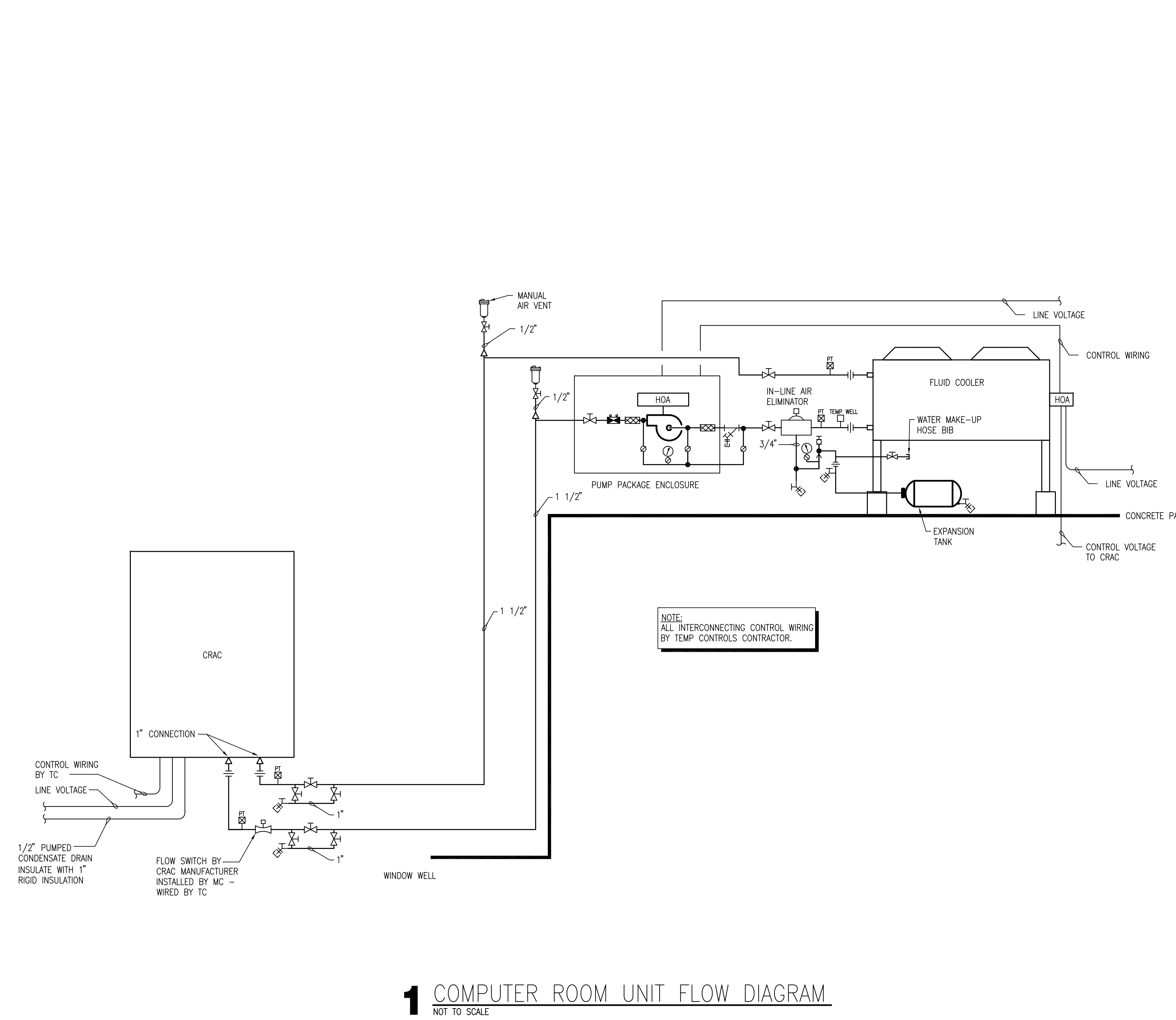
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| Revisions | Date | CONSULTANTS: | ARCHITECT/ENGINEERS: | Drawing Title PARTIAL BASEMENT PLANS WINDOW ELEVATIONS AND DETAILS | Project Title VA IRON MOUNTAIN REPLACE HVAC TELEPHONE ROOM | Project Number 585-08-110 | Office of Construction and Facilities Management |
| | | | | Approved: Project Director | Location IRON MOUNTAIN, MICHIGAN | Building Number No. 1 | |
| | | | | | Date AUGUST 26, 2008 | Drawing Number A.101 | |
| | | | | | Checked DLG | Dwg. 3 of 7 | |
| | | | | | Drawn ERM | | |



- ## DEMOLITION KEYED NOTES
- 1 REMOVE EXISTING AIR-COOLED CONDENSING UNIT, PIPING AND CONTROLS COMPLETE. REMOVE CONCRETE PAD COMPLETE.
 - 2 REMOVE EXISTING AIR HANDLING UNIT AND CONTROLS COMPLETE.
 - 3 REMOVE EXISTING LOUVER AND MODIFY WALL OPENING AS REQUIRED FOR NEW EXHAUST AND FRESH AIR DUCTWORK.
 - 4 REMOVE EXISTING STEAM HUMIDIFIER AND CONTROLS COMPLETE. REMOVE STEAM AND CONDENSATE PIPING TO FURTHEST ACCESSIBLE POINT AND CAP.
 - 5 REMOVE GRILLE/DIFFUSER AND DUCTWORK SHOWN DASHED COMPLETE. CAP EXISTING DUCTWORK IN 2 PLACES AS SHOWN. WALL PATCHING BY GENERAL CONTRACTOR.
 - 6 REMOVE EXISTING MOTORIZED DAMPERS AND CONTROLS COMPLETE.
 - 7 REMOVE EXISTING ABANDONED RISER THROUGH FLOOR TO FIRST FLOOR CEILING. PATCH OPENING WITH 10 CA. BOLTED AND SEALED TO STRUCTURE. VERIFY EXACT LOCATION.

[illegible]

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot



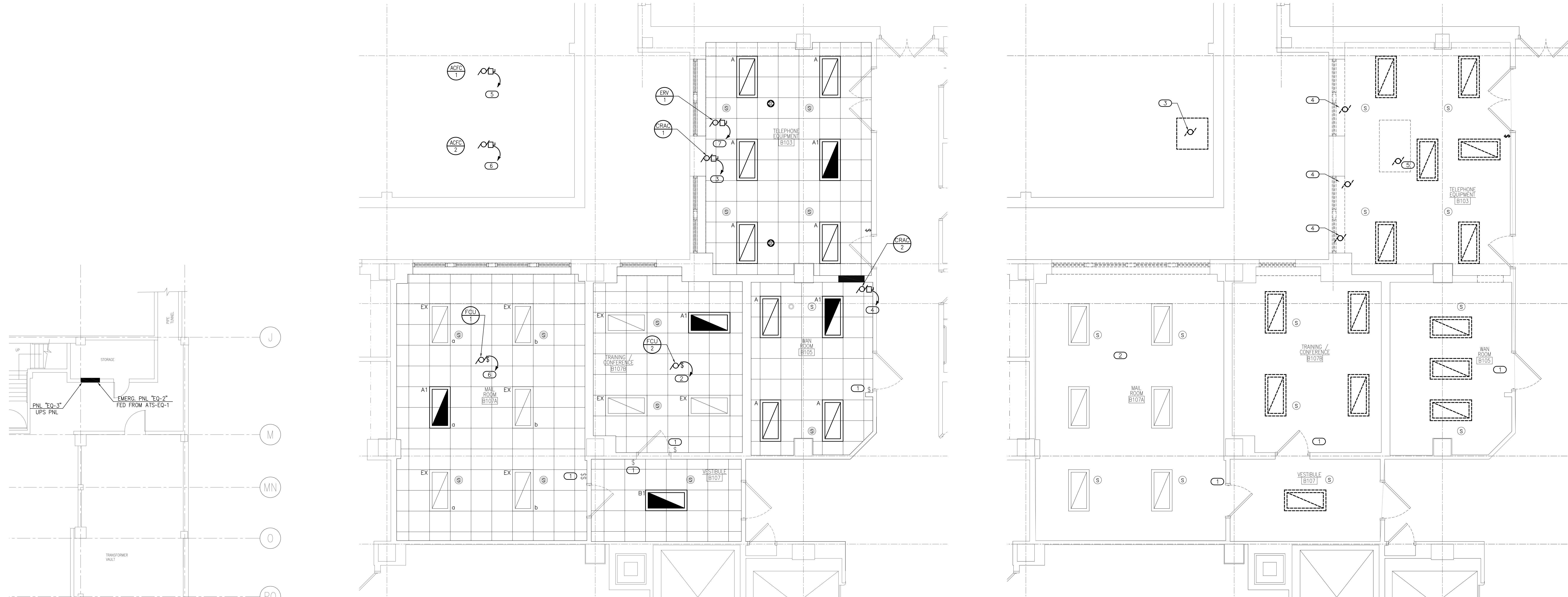
| FC-1, FC-2 INPUT/OUTPUT SUMMARY | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------------|-----------------|-----------------------|----------------|---------|-----------------|----------|----------|----------|------------|--------------------|-----------------|-------------|------------|-----------------|----------------|-------------|--------|
| SYSTEM, APPARATUS OR AREA POINT DESCRIPTION | INPUTS | | | | | | | | | | OUTPUTS | | | | | SYSTEM FEATURES | | | |
| | ANALOG | | | | | | | | | | | | | | | ALARMS | | PROGRAMS | |
| | MEASURED | | | | CALC. | | | | | DIGITAL | | ANALOG | | DIGITAL | | | | | |
| | TEMPERATURE | RELATIVE HUMIDITY | STATIC PRESSURE | DIFFERENTIAL PRESSURE | AIR FLOW (CFM) | CURRENT | DAMPER POSITION | FEEDBACK | ENTHALPY | RUN TIME | EFFICIENCY | TEMPERATURE SWITCH | PRESSURE SWITCH | FLOW SWITCH | END SWITCH | CURRENT SWITCH | SMOKE DETECTOR | FREEZE STAT | STATUS |
| SUPPLY FAN S/S | | | | | | | | | | | | | | | | | | | |
| SUPPLY FAN STATUS | | | | | | | | | | | | | | | | | | | |
| OW VALVE | | | | | | | | | | | | | | | | | | | |
| SPACE TEMPERATURE | X | | | | | | | | | | | | | | | | | | |
| DISCHARGE TEMPERATURE | X | | | | | | | | | | | | | | | | | | |

| ERV-1 INPUT/OUTPUT SUMMARY | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------------|-----------------|-----------------------|----------------|---------|-----------------|----------|----------|----------|------------|--------------------|-----------------|-------------|------------|-----------------|----------------|-------------|--------|
| SYSTEM, APPARATUS OR AREA POINT DESCRIPTION | INPUTS | | | | | | | | | | OUTPUTS | | | | | SYSTEM FEATURES | | | |
| | ANALOG | | | | | | | | | | | | | | | ALARMS | | PROGRAMS | |
| | MEASURED | | | | CALC. | | | | | DIGITAL | | ANALOG | | DIGITAL | | | | | |
| | TEMPERATURE | RELATIVE HUMIDITY | STATIC PRESSURE | DIFFERENTIAL PRESSURE | AIR FLOW (CFM) | CURRENT | DAMPER POSITION | FEEDBACK | ENTHALPY | RUN TIME | EFFICIENCY | TEMPERATURE SWITCH | PRESSURE SWITCH | FLOW SWITCH | END SWITCH | CURRENT SWITCH | SMOKE DETECTOR | FREEZE STAT | STATUS |
| SUPPLY FAN STATUS | | | | | | | | | | | | | | | | | | | |
| EXHAUST FAN STATUS | | | | | | | | | | | | | | | | | | | |
| SUPPLY AIR TEMPERATURE | X | | | | | | | | | | | | | | | | | | |
| EXHAUST AIR TEMPERATURE | X | | | | | | | | | | | | | | | | | | |
| UNIT STATUS | | | | | | | | | | | | | | | | | | | |
| UNIT S/S | | | | | | | | | | | | | | | | | | | |

| CRAC-1, CRAC-2 INPUT/OUTPUT SUMMARY | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------------|-----------------|-----------------------|----------------|---------|-----------------|----------|----------|----------|------------|--------------------|-----------------|-------------|------------|-----------------|----------------|-------------|--------|
| SYSTEM, APPARATUS OR AREA POINT DESCRIPTION | INPUTS | | | | | | | | | | OUTPUTS | | | | | SYSTEM FEATURES | | | |
| | ANALOG | | | | | | | | | | | | | | | ALARMS | | PROGRAMS | |
| | MEASURED | | | | CALC. | | | | | DIGITAL | | ANALOG | | DIGITAL | | | | | |
| | TEMPERATURE | RELATIVE HUMIDITY | STATIC PRESSURE | DIFFERENTIAL PRESSURE | AIR FLOW (CFM) | CURRENT | DAMPER POSITION | FEEDBACK | ENTHALPY | RUN TIME | EFFICIENCY | TEMPERATURE SWITCH | PRESSURE SWITCH | FLOW SWITCH | END SWITCH | CURRENT SWITCH | SMOKE DETECTOR | FREEZE STAT | STATUS |
| UNIT STATUS | | | | | | | | | | | | | | | | | | | |
| SPACE TEMPERATURE | | | | | | | | | | | | | | | | | | | |
| SPACE RELATIVE HUMIDITY | | | | | | | | | | | | | | | | | | | |
| COMPRESSOR STATUS | | | | | | | | | | | | | | | | | | | |
| ELECTRIC REHEAT STATUS | | | | | | | | | | | | | | | | | | | |
| MOISTURE ALARM (DRAIN PAN) | | | | | | | | | | | | | | | | | | | |
| UNIT ALARM | | | | | | | | | | | | | | | | | | | |
| MOISTURE ALARM (REMOTE SENSOR) | | | | | | | | | | | | | | | | | | | |
| SHARED SUPPLY AIR MOTORIZED DAMPER | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | |
|-----------|------|--------------|----------------------|------------------------------|--|------------------------------|--------------------------|-------------------------------------|--|
| Revisions | Date | CONSULTANTS: | ARCHITECT/ENGINEERS: | Drawing Title POINTS LIST | Project Title VA IRON MOUNTAIN REPLACE HVAC TELEPHONE ROOM | Project Number 585-08-110 | Building Number No. 1 | Location IRON MOUNTAIN, MICHIGAN | Office of Construction and Facilities Management |
| | | | | Approved: Project Director | Date AUGUST 26, 2008 | Checked JAU | Drawn BWY | M102 Dwg. 6 of 7 | Department of Veterans Affairs |

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one eighth inch = one foot
one sixteenth inch = one foot



3 PARTIAL SUB-BASEMENT REFERENCE
2 PARTIAL BASEMENT POWER AND LIGHTING PLAN
1 PARTIAL BASEMENT FLOOR PLAN - DEMOLITION

POWER AND LIGHTING NOTES

- RECONNECT NEW LIGHTING TO EXISTING LIGHTING CIRCUITS FROM PANEL "WB-A" RE-USE EXISTING SWITCHING. TIE EMERGENCY LIGHTING FIXTURES TO EMERGENCY POWER PANEL IN AREA. SWITCHES ARE EXISTING.
- E.C. SHALL LOWER SPEAKER TO ALLOW FOR NEW CEILING AND RE-INSTALL SPEAKERS AFTER NEW CEILING IS INSTALLED.
- COMBINATION STARTER/DISCONNECTS FOR CRU-1 AND CRU-2, SHALL BE PROVIDED BY MECHANICAL. SEE MECHANICAL SCHEDULES.

KEYED POWER & LIGHTING NOTES

- RE-USE EXISTING SWITCHING.
- PROVIDE CONNECTION TO FAN COIL UNIT WITH 2-#12's IN 3/4" CONDUIT AND 20/1 BREAKER ADDED TO EXISTING PANEL "WB-A" APPROX. 180 FT. AWAY IN CORRIDOR OUTSIDE OF DISHWASHER ROOM.
- PROVIDE CONNECTION TO CRAC-1 WITH 3-#4+1-#8 GRD IN 1-1/4" CONDUIT AND 70/3 BREAKER ADDED TO EXISTING PANEL EQ-2, APPROX. 125 FT. AWAY IN SUB BASEMENT CORRIDOR NEXT TO ELECTRICAL VAULT.
- PROVIDE CONNECTION TO CRAC-2 WITH 3-#2+1-#6 GRD IN 1-1/4" CONDUIT AND 100/3 BREAKER ADDED TO EXISTING PANEL EQ-2 APPROX. 110 FT. AWAY IN SUB BASEMENT CORRIDOR NEXT TO ELECTRICAL VAULT.
- PROVIDE CONNECTION TO ACFC-1 WITH 4-#12 IN 3/4" CONDUIT AND 20/3 BREAKER ADDED TO EXISTING PANEL EQ-2 APPROX. 140 FT. AWAY IN SUB BASEMENT CORRIDOR NEXT TO ELECTRICAL VAULT.
- PROVIDE CONNECTION TO ACFC-2 WITH 4-#12 IN 3/4" CONDUIT AND 20/3 BREAKER ADDED TO EXISTING PANEL EQ-2 APPROX. 140 FT. AWAY IN SUB BASEMENT CORRIDOR NEXT TO ELECTRICAL VAULT.
- PROVIDE CONNECTION TO ERV-1 WITH 4-#12 IN 3/4" CONDUIT AND 20/3 BREAKER ADDED TO EXISTING PANEL EQ-2 APPROX. 140 FT. AWAY IN SUB BASEMENT CORRIDOR NEXT TO ELECTRICAL VAULT.

GENERAL ELECTRICAL SPECIFICATIONS

RACEWAYS, CONDUCTORS, AND WIRING DEVICES:

- E.C. SHALL RE-USE EXISTING CONDUIT, WIRE AND CABLE AND SWITCHES WHERE EVER POSSIBLE. ALL WIRING SHALL BE IN APPROVED RACEWAY. USE RACEWAYS IN ACCORDANCE WITH ELECTRICAL CODES. IN GENERAL, PROVIDE ELECTRICAL METALLIC TUBING, OR MC CABLE WITH APPROVED FITTINGS ABOVE SUSPENDED CEILINGS, IN PARTITIONS, AND IN OTHER AREAS NOT SUBJECT TO MOISTURE. ALL EMT CONDUIT SHALL BE MINIMUM 1/2" SIZE. USE COMPRESSION TYPE FITTINGS OR SET SCREW ON E.M.T. - NO INDENTER TYPE SHALL BE USED. USE RIGID OR INTERMEDIATE METAL CONDUIT IN DAMP OR WET LOCATION WITH WATERTIGHT FITTINGS. INSTALL GROUNDING CONDUCTOR.
- PROVIDE JUNCTION BOXES AND PULL BOXES AS REQUIRED BY ELECTRICAL CODES. PROVIDE APPROPRIATE FUTURE BOXES FOR WIRING DEVICES. OUTLET BOXES FOR DRY INTERIOR LOCATIONS SHALL BE GALVANIZED STEEL SIZED IN ACCORDANCE WITH CONDUCTOR FILL. BACK-TO-BACK OUTLET BOX INSTALLATIONS WILL NOT BE USED. SEAL BOXES IN EXTERIOR WALLS TO PREVENT INFILTRATION. BOXES LARGER THAN 4" X 4" SHALL MEET THE REQUIREMENTS FOR THE AREA IN WHICH INSTALLED. WHERE EXPOSED, BOXES SHALL BE PAINTED GRAY.
- RACEWAYS SHALL BE CONCEALED IN ALL FINISHED AREAS IN THE BEST MANNER POSSIBLE. RACEWAYS SHALL BE RUN IN PARALLEL WITH CONSTRUCTION WHERE EXPOSED AND ABOVE SUSPENDED CEILINGS. USE RODS AND STEEL CHANNELS TO SUPPORT MULTIPLE CONDUIT RACEWAY RUNS. SINGLE CONDUIT RUNS SHALL BE SECURED TO STRUCTURE WITH HEAVY DUTY STRAPS.
- ALL WIRE AND CABLE SHALL BE COPPER WITH A MINIMUM #12 AWG SIZE. INSTALL EQUIPMENT GROUNDING CONDUCTOR WITH ALL NEW CIRCUITS. INSTALL ALL WIRING IN APPROVED RACEWAYS, CONCEALED WHERE POSSIBLE. OBTAIN PERMISSION FROM OWNER IF WIRING CANNOT BE INSTALLED CONCEALED.
- USE TYPE THHN/THWN CU WIRE. PROVIDE CONDUCTORS WITH 90 DEGREE C INSULATION FOR WIRING LOCATED INSIDE LIGHT FIXTURES AND FOR FEEDERS TO PANELBOARDS. SIZE AND USE CONDUCTORS IN ACCORDANCE WITH ELECTRICAL CODES.

GROUNDING: ARTICLE #250 OF N.E.C. APPLIES

- EQUIPMENT GROUNDING CONDUCTOR: PROVIDE SEPARATE, INSULATED GREEN CONDUCTOR WITHIN EACH RACEWAY AND CABLE TRAY. SIZED PER NEC OR AS INDICATED IN THE CONTRACT DOCUMENTS WHICHEVER IS LARGER. TERMINATE EACH END ON SUITABLE LUG, BUS, ENCLOSURE OR BUSHING, PER NEC. PROVIDE A GROUND WIRE FROM EACH DEVICE TO THE RESPECTIVE ENCLOSURE.

LIGHTING:

- PROVIDE LIGHTING FIXTURES AS SCHEDULED ON DRAWINGS.
- PROVIDE 5%, BUT NOT LESS THAN 2 SPARE LAMPS FOR EACH LAMP TYPE. DELIVER TO OWNER.

| LIGHT FIXTURE SCHEDULE | | | | | |
|------------------------|--|----------|---------------------------|----------|-------|
| TYPE | DESCRIPTION | MFG | REFERENCE CATALOG # | LAMPS | VOLTS |
| A | 2X4 3 LAMP SPECIFICATION GRADE LAY-IN TROFFER WITH HOLOPHANE 84Y LENS ELECTRONIC BALLAST AND T8 LAMPS. PROVIDE WITH BALLAST DISCONNECT PER NEC 2008. | LITHONIA | 2GT-3-32-84Y-MVOLT-GE101S | 3-32W T8 | MVOLT |
| A1 | FIXTURE SHALL BE UNSWITCHED, THIS FIXTURE IS THE SAME AS TYPE "A" | | | | |
| B | 2X4 2 LAMP SPECIFICATION GRADE LAY-IN TROFFER WITH HOLOPHANE 84Y LENS ELECTRONIC BALLAST AND T8 LAMPS. PROVIDE WITH BALLAST DISCONNECT PER NEC 2008. | LITHONIA | 2GT-2-32-84Y-MVOLT-GE101S | 2-32W T8 | MVOLT |
| B1 | FIXTURE SHALL BE UNSWITCHED, THIS FIXTURE IS THE SAME AS TYPE "B" | | | | |
| NOTE: | | | | | |

GENERAL ELECTRICAL NOTES

- ALL WORK SHALL BE IN CONFORMANCE WITH NATIONAL, STATE, AND LOCAL CODES AND/OR ORDINANCES.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER CONTRACTORS.
- SEE ARCHITECTURAL, MECHANICAL, & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO GIVE APPROXIMATE LOCATIONS AND OVERALL DESIGN INTENT. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCTS, MATERIALS, AND ELECTRICAL METHODS WHICH HAVE NOT BEEN SHOWN OR INDICATED BUT ARE REQUIRED FOR A COMPLETE SYSTEM TO THE STANDARDS OF THE INDUSTRY.
- INSTALL LIGHTING FIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUPPORTING DEVICES FOR ADEQUATE SUPPORT OF FIXTURES FROM STRUCTURE.
- UPON COMPLETION OF THE ELECTRICAL WORK, THE INSTALLATION SHALL BE TESTED FOR CONTINUITY, GROUNDS, AND SHORT CIRCUITS. THE ELECTRICAL CONTRACTOR SHALL DEMONSTRATE PROPER PERFORMANCE OF ALL SYSTEMS. ALL DEFECTIVE WORK OR MATERIALS SHALL BE REPLACED OR REPAIRED AS NECESSARY AND RETESTED.
- ELECTRICAL RACEWAYS THAT PENETRATE FIRE RATED ASSEMBLIES SHALL BE SLEEVED AND SEALED AS PER THE INTERNATIONAL BUILDING CODE 2006, SECTION 712.

GENERAL DEMOLITION NOTES

- RETAIN EXISTING LIGHTING CIRCUITS FROM PANEL "WB-A" FOR RE-USE WITH NEW FIXTURES.
- E.C. SHALL LOWER SPEAKER TO ALLOW FOR NEW CEILING AND RE-INSTALL SPEAKERS AFTER NEW CEILING IS INSTALLED.

KEYED DEMOLITION NOTES

- EXISTING SWITCHING SHALL REMAIN.
- WIRE UP EXISTING FIXTURES TO ALLOW FOR INSTALLATION OF NEW CEILING. ONCE CEILING IS INSTALLED LOWER FIXTURES BACK INTO GRID.
- DISCONNECT EXISTING AIR-COOLED CONDENSING UNIT. REMOVE FEED AND CONDUIT BACK TO PANEL "BW" APPROX. 150 FT. AWAY. BREAKER SHALL REMAIN IN PANEL FOR FUTURE USE, "LABEL AS "SPARE."
- DISCONNECT EXISTING MOTORIZED DAMPERS (3 TOTAL). REMOVE FEED AND CONDUIT BACK TO PANEL "WB-A" APPROX. 180 FT AWAY. BREAKER SHALL REMAIN FOR FUTURE USE.
- DISCONNECT EXISTING AIR HANDLING UNIT AND ASSOCIATED DISCONNECT. REMOVE FEED AND CONDUIT BACK TO PANEL EQ-2. BREAKER SHALL REMAIN FOR FUTURE USE.

ELECTRICAL ABBREVIATIONS

| | | | |
|------|-----------------------|-----|-----------------------|
| AFF | ABOVE FINISH FLOOR | LV | LOW VOLTAGE |
| AFG | ABOVE FINISH GRADE | MC | MECHANICAL CONTRACTOR |
| ANNC | ANNUNCIATOR | GFI | GROUND FAULT |
| CC | CONTROLS CONTRACTOR | PC | PLUMBING CONTRACTOR |
| EC | ELECTRICAL CONTRACTOR | PNL | PANEL |
| EX | EXISTING | WP | WEATHER PROOF |
| GC | GENERAL CONTRACTOR | 20A | 20 AMP |
| IG | ISOLATED GROUND | | |

SYMBOLS LEGEND

LIGHTING

FIXTURE TYPE PER SCHEDULE

TROFFER STYLE FIXTURE, TYPE AS NOTED

SWITCH LEGS

FIXTURE ON REMAIN ON 24/7

SWITCHING

20A, 120/277V SPST SWITCH

20A, 120/277V 3-WAY SWITCH

POWER

MOTOR CONNECTION

DISCONNECT

FIRE PROTECTION

SPINKLER HEAD (EXISTING)

FIRE ALARM

DUCT DETECTOR

| | | | | | | | | | | | | | |
|---------------------|--|-----------------------------|--|---|--|---|--|------------------------|--|---|--|--|--|
| CONSULTANTS: | | ARCHITECT/ENGINEERS: | | Drawing Title | | Project Title | | Project Number | | Office of Construction and Facilities Management | | | |
| | | | | PARTIAL BASEMENT ELECTRICAL PLAN | | VA IRON MOUNTAIN REPLACE HVAC TELEPHONE ROOM | | 585-08-110 | | | | | |
| | | | | Approved: Project Director | | Location | | Building Number | | | | | |
| | | | | | | IRON MOUNTAIN, MICHIGAN | | No. 1 | | Drawing Number | | | |
| | | | | | | Date | | Checked | | SW | | | |
| | | | | | | AUGUST 26, 2008 | | Drawn | | PJH | | | |
| | | | | | | | | E.100 | | Dwg. 7 of 7 | | | |
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